Work Orde January-02-13		107		*95	107*						Page 1
Item ID: Revision ID:	D4012-1		,	Accept	*N9(	<b>1004</b>	<b>010</b>	<b>)*</b> s	etup Star Stop	1.71	S1* S2*
Item Name: Start Date: Required Date: Reference:	Cushion 1/02/13 1/11/13	<b>Start Qty:</b> 12.00 <b>Req'd Qty:</b> 12.00	*12* *12*		Cust I Custo	tem ID: mer:				IN	
Approvals:	Process Plan	n:	Date:	Tooling: SPC (Y/N):		Date:		F	tun Star Stop	171	R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool	ID Too	l# Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revi	ision Nbr									:
D4012	В		•								
*1 \\ \\ \text{Mill Conv} \tag{Conventional Milling}	ng Machine	Memo		0.00	NIP	<i> 3/03/1</i>	9	14	φ		
*110 *110* QC Quality Control		QC2- Inspect parts off m	achine FAI/FAIB	0.00	AND 13	3/03/19		14	<i>_</i>		, 
120 *120* QC Quality Control		QC8- Inspect parts - seco	and check	0.00	b.a 1	3/03/19		14	<i>_</i>		0AS 08

NCR:	Yes	1	No
NCK:	res	/	INO

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:
------	-------

			·····						QA Closed:	Date:	:
Work Ordei	r.				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No					Rework Scrap	<b>⊣ I</b>	Skid-tube Machining	Crosstube Small Fab Finishing	1 1	Water Jet d. Eng. Coor re/Packaging	Engineering Quality Other
NCR N	o				Use-as-is Work Order Update						Other
Root	,			Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved					,						
•	· · · · · · · · · · · · · · · · · · ·		<del></del>		F	AULT CATE	GORY				
Landing	g Gear				General						
	Bending Centre No Cracks Crushed/			o/s	Bend BOM/Route Broken/Damaged Burrs	<del></del>	are tion Incomplete tions Incomplete/	'Unclear	Ovalized Over/Under Part Incorre Part Lost/M	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
-	Cuffs Heat Trea		<b>-</b> 1		Contamination Countersink	Mislab			Part Moved Positioned \	Wrong	<b>7</b> ₀
4	Inspection	•	lube		Cut Too Short	Misrea	α		Power Loss/	Surge	Other
24	Ripples in			.  -	Drill Holes	Offset	Calibratic			····	
-	Torque W			' <u> </u>	Drawing	<b>}i</b>	Calibration				·
-	Turning Sequence Finish Wave/Twist in Tube Folio			<del>  </del>	Sequence e Dimensions			W 102			

126

QC5- Inspect part completeness to step on W/O

\*126\*

OC

Memo

0.00 1344

Quality Control

130

Identify as per dwg & Stock Location:

WITH HEAT GUN, LET IT COOL DOWN BEFORE REMOVING CLAMP.

\*120\*

Packaging Packaging

Memo

0.00

**€** €:

Pressure/Forced

Weld

Other

Temperature/Cure

Wrong Stock Pulled

Ovalized

Part Incorrect

Part Moved
Positioned Wrong

Part Lost/Missing

Power Loss/Surge

Over/Under tolerance

NCR:	Yes	/ No				WORK ORDER NON-C	CONFORM	MANCE / UP		DQ QA Close		_Date: _Date:	
Work Orde	er:	· · · · · · · · · · · · · · · · · · ·				DISPOSITION			AGAINST DEI	PARTME	NT/PROCES	is	
Part N	-					Rework Scrap Use-as-is Work Order Update	ı	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite		Water Prod. Eng. C tore/Packa Supp	oor.	Engineering Quality Other
Root		_			l.	ption of work order update	Initial		tion	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verific	cation	QC Inspector
Doc/Data	Щ			i					,	· · ·			
Equip/Tooling													
Operator			1						:				
Material													
Setup													
Other										!			
Process										İ			
Supplier	П												
Training	$\square$												
Unapproved													

**FAULT CATEGORY** 

Grain

Hardware

Maintenance

Out of Calibration

Out of Sequence

**Outside Dimensions** 

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

General

Bend

Burrs

BOM/Route

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Broken/Damaged

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

**Landing Gear** 

Bending

Cracks

Cuffs

**Heat Treat** 

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Centre Not Concentric to O/S

Work Orde January-02-13				*951			Page 3			
Item ID: Revision ID: Item Name:	D4012-1 Cushion	2. 2		Accept	*N9000	4010	<b>N</b> *	Setup	Start Stop	*NS1* *NS2*
Start Date: Required Date:	1/02/13 1/11/13	<b>Start Qty:</b> 12.00 <b>Req'd Qty:</b> 12.00	*12* *12*		Cust Item ID: Customer:					
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):	Date:		Run		Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID T	Γool # Plan Code	Acce Qty	pt Re Qt	•	Reject Insp. Number Stamp

0.00

Memo

140

Quality Control

NCR:	Yes	1	No
INCN.	162	/	110

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA:	Date:	
	-	

									·		QA Clos	ed: C	ate:	
Work Orde	er.		-			DISPOSITION				AGAINST DE	PARTME	NT/PROCESS		
Part NCR 1	- _ No.					Rework Scrap Use-as-is Work Order Update			Skid-tube  Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	<b>⊣</b>	Water Jet Prod. Eng. Coor. Store/Packaging Supplier		Engineering Quality Other
				•		· <u> </u>								
Root						ption of work order update		nitial	Ac	ction	Sign 8	l [		
Cause		Date	Step	Qty	(	or Non-conformance	Chi	ef Eng	Desc	cription	Date	Verificat	ion	QC Inspector
Doc/Data	Ш										1 '			
Equip/Tooling														
Operator													ł	
Material														
Setup													İ	
Other														
Process				i									[	
Supplier	Ц													
Training				•										
Unapproved													l	
		·				F	AUL	CATE	GORY					
Landi	ng G	ear				General	_			<b></b>	- ! - !		_	
		Bending				Bend	Ш	Grain			Ovalized			Pressure/Forced
		Centre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Un	der tolerance		Temperature/Cure
	LJ'	Cracks				Broken/Damaged	Ш	Inspecti	ion Incomplete		Part Inco	orrect		Weld
		Crushed/0	Crimped.			Burrs		Instruct	ions Incomplete/	/Unclear	Part Lost	t/Missing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance		Part Mစုံ	ved		
		Heat Trea	t			Countersink		Mislabe	eled		Position	ed Wrong		
		nspection	Strip in	Tube		Cut Too Short		Misread	d		Power Lo	oss/Surge		Other
	ا	Ripples in	Bend			Drill Holes		Offset						
		Torque W	aves in E	xtrusio	n [	Drawing		Out of (	Calibration		<u>,</u>			
		Turning Se	equence			Finish		Out of S	Sequence					
	١	Wave/Twi	ist in Tub	e		Folio		Outside	Dimensions		1			

## **Picklist Print**

January-02-13 1:52:38 PM

Work Order ID:

95107

Parent Item:

D4012-1

Parent Item Name:

Cushion

**Start Date: 1/02/13** 

Required Date: 1/11/13

Page 1

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP RevA: New issue 09.10.28 DD verified by:JLM

09.11.18 DD verified by:JLM IPP Rev:C

IPP RevB: revA as per dwg

IPP Rev:C 11.01.10 as per dwg Rev.B DD verified

by:JLM

Item Name Item	em ID	Purch	Item	Location	Location	Route Seq ID	Measure	Hand		Qty	Issued	Issued	:
D4287-3		Manufactured	No			100	f	6.4000	0.37	4.6736844			

UHMW U-Channel

97824

MJP 13/03/19

NCR:	Yes	/	No

NCR: \	NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE  QA Closed: Date:											
Work Orde	ar:				DISPOSITION				AGAINST DEI	PARTMENT	/PROCESS	
Part No.  NCR No.					Rework Scrap Use-as-is Work Order Update	Thern	Skid-tube  Machining noforming  Large Fab	Crosstube Small Fab Finishing Composite	ab Prod. Eng. Coor. Quali			
Root				Descri	ption of work order update	1	nitial	Act	ion	Sign &		
Cause	Date	Step	Qty	C	or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling		ļ										·
Operator												
Material									-			
Setup												
Other												
Process										İ		
Supplier												
Training												
Unapproved												
FAULT CATEGORY												
Landir	ng Gear				General						-	
	Bending				Bend		Grain			Ovalized		Pressure/Forced
Centre Not Concentric to O/S BOM/Route							Hardwa	re		Over/Unde	r tolerance	Temperature/Cure

Landing	Gear	Ge	neral			. i	_	
	Bending	Bend	:	Grain		Ovalized		Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Unde	r tolerance	Temperature/Cure
	Cracks	Broken/Dar	naged	Inspection Incomplete		Part Indorre	ect	Weld
	Crushed/Crimped.	Burrs		Instructions Incomplete/Unclear		Part Lost/M	/lissing	Wrong Stock Pulled
	Cuffs	Contamination	on	Maintenance		Part Moved	di .	
	Heat Treat	Countersinl	(	Mislabeled		Positioned	Wrong	
	Inspection Strip in Tube	Cut Too Shor	t	Misread		Power Loss	/Surge	Other
	Ripples in Bend	Drill Holes		Offset	_			
	Torque Waves in Extrusion	Drawing		Out of Calibration				
	Turning Sequence	Finish		Out of Sequence				
	Wave/Twist in Tube	Folio		Outside Dimensions				

DART AEROSPACE LTD	Work Order:	95107
Description: Cushion	Part Number:	D4012-1
Inspection Dwg: D4012 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.25	+/-0.030	1,247			MJP-04	Veru
1.050	+/-0.010	1,053 0,096 4,395		-	21.7	// !
0.10	+/-0.030	0.096			111	111
4.41	+/-0.030	4.395	/		111	111
0.094						
0.17	+/-0.030	0.173	/		1118-04	vern
0.076	+ 0.015	0,173	V_		MJP-01	I" micro
		,				
					·	
				<u> </u>		
	·					

Measured by:	NIPAS	Audited by:	<u> </u>	DAG.	Preliminary Approval:	
Date:	13/03/19	Date:	13/03/19	9.89 9.89	Date:	

Rev	Date	Change	Revis	ed by	Approved
Α	11.01.17	New Issue	KJ	AA	7/
В	12.08.02	Dwg Rev updated	KJ	77+	C/N/
				1/ /	

95107 13-01-4 <u>∆</u> (MAKE FROM D4012-1F) 1.050 -R0.031 0.17 ~~ - 0.076<sup>+0.015</sup> B D4012-1F FLAT MACHINED STATE CHANGED RAW MATERIAL TO REDUCE MANUFACTURING COSTS; PART NOW MACHINED FLAT AND SHAPED WITH RADIUS. REF: PAR10-29 10.12.07 A NEW ISSUE MB 09.10.19 REV. DESCRIPTION DATE I BY DESIGN NOTES:
1) MATERIAL: MAKE FROM D4287-3 (A)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4012-1" AND B/N "BXXXXX" PER QSI 044 6.1
7) WEIGHT: 0.02 lbs **DART AEROSPACE LTD** DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. B D4012 MFG. APPR. SHEET 1 OF 1 APPROVED TTTLE SCALE **CUSHION** DE APPR. DATE 10.12.07